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(54) Title: COMPUTATION OF SOFT BITS FOR A TURBO DECODER IN A COMMUNICATION RECEIVER

a) b0   b) b1   c) b2   d) b3

○ 0   ● 1

| b0 | b1 | b2 | b3 |
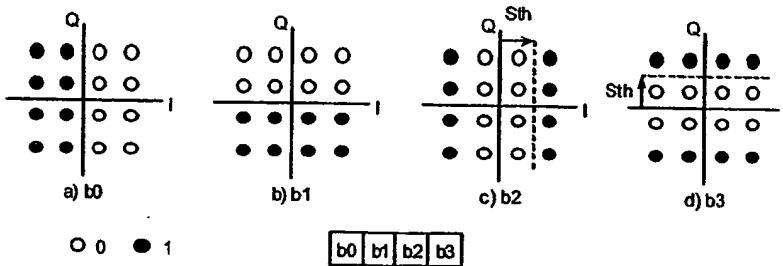
(57) Abstract: A device (20) for computing a threshold Sthi used in demodulating a quadrature amplitude modulated (QAM) signal to generate a plurality of soft bits per received symbol for input to a turbo decoder, the device including: means (30) for computing the mean amplitude A of the received symbols and multiplying the mean amplitude A by of the received symbols and multiplying the mean amplitude A by a constant C_i for a square QAM constellation with 4^m points, such that $Sth_i = A \times C_i$ where m is a positive integer and i is a positive integer from 1 to $(\sqrt{4^{m-1}})-1$.
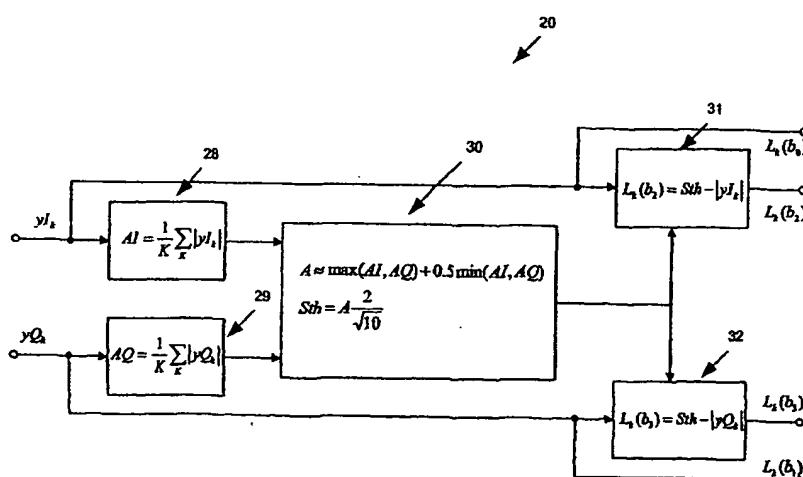
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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